UNITED
NATIONS

EP

UNEP/OzL.Pro.WG.1/35/3

Distr.: General
8 March 2015

Original: English

United Nations
Environment
Programme

Open-ended Working Group of the Parties to the Montreal Protocol on Substances that Deplete the Ozone Layer
Thirty-fifth meeting
Bangkok, 22–24 April 2015
Item 7 of the provisional agenda*

Key issues for discussion towards a possible hydrofluorocarbonmanagement policy and legal framework under the Montreal Protocol

Proposed amendment to the Montreal Protocol submitted by Canada, Mexico and the United States of America

Note by the Secretariat

Pursuant to article 9, paragraph 2, of the Vienna Convention for the Protection of the Ozone Layer, the Secretariat is circulating a joint proposal submitted by Canada, Mexico and the United States of America to amend the Montreal Protocol in respect of hydrofluorocarbon phase-down (see annex III). The proposal is accompanied by a covering letter (see annex I), a summary of the proposal (see annex II) and a draft decision (see annex IV). All four annexes are being circulated as received and have not been formally edited by the Secretariat.

* UNEP/OzL.Pro.WG.1/35/1.

K1500917 140415

Annex I

Dear Executive Secretary:

On behalf of the Governments of Canada, Mexico, and the United States of America, we are writing to submit a proposed amendment to the Montreal Protocol to phase down the production and consumption of hydrofluorocarbons (HFCs). We are advocating for this proposal because HFC consumption and production are continuing to grow rapidly, and we need to initiate comprehensive efforts to prevent this growth and ultimately phase down HFCs.

We have incorporated a number of changes in our approach to an amendment this year that are intended to respond to feedback we heard last year, including changes to the baseline and reduction schedule for Article 5 and non-Article 5 countries, a delay in timing of some entry into force provisions, and inclusion of a technology review process to revisit the agreed reduction schedule in light of the deployment of HFC alternatives in coming years, particularly in high ambient temperature conditions. Similar to the 2014 North American proposal, this revised amendment proposal has the potential to produce environmental benefits of more than 90 gigatons of carbon dioxide equivalent (C02eq) cumulatively by 2050 which is equal to roughly two years of emissions of all anthropogenic greenhouse gases at current emission levels. Therefore, this proposal represents our ideas on how we could avoid rapid HFC growth and achieve substantial environment benefits. We welcome other ideas that we know will be forthcoming and we look forward to working with others to achieve an outcome that is acceptable to all countries.

We are pleased that later this month there will be both a workshop and an Open-Ended Working Group (OEWG) dedicated to HFC Management. It is a tremendous opportunity to have a meeting devoted to the broad range of issues associated with managing HFCs and to considering the Montreal Protocol's role in this regard. We encourage all Parties to take advantage of this opportunity to bring forward a full range of issues for discussion. We believe that our amendment is one important component of that discussion.

We would suggest that a broad framing for the discussion is appropriate at the OEWG, including consideration of the following:

1. How to define a starting time and baseline to reduce HFCs;
2. What rate of reduction can be achieved by Article 5 and non-Article 5 Parties;
3. How to structure a technology review to inform Parties on the deployment of climate-friendly alternatives to HFCs, particularly for high-ambient temperature conditions, to consider future adjustments to the schedule;
4. How can byproduct emissions of HFCs be reduced;

5. How can we mobilize financing of an HFC phasedown through the Multilateral Fund;
6. How do reductions in HFCs relate to the existing phase-out schedule for HCFCs; and
7. How can an HFC phase-down be accomplished synergistically to support the United Nations Framework Convention on Climate Change (UNFCCC).

We believe the agenda you have proposed for the OEWG provides an excellent opportunity for exchanging ideas on these topics as part of a broad discussion of the challenges of HFC Management, particularly in agenda items 6, 7, and 8.

We intend for our revised amendment proposal to make a positive contribution to the discussion on HFC Management by the OEWG. We are genuinely interested in hearing the thoughts and ideas of others on our proposal, and are open to consider any other ideas or proposals that may be made before, during or after the OEWG meeting. All of these ideas will further inform and enrich the discussion of HFC Management, and help us better understand how to accommodate concerns of other countries in designing an appropriate and effective phase-down of HFCs.

Finally, it is important that we are able to focus our efforts at each of our meetings this year. We strongly encourage you and our co-chairs to consider ways to carry through key ideas and challenges identified at the April meeting and workshop into later meetings of the OEWG and Meeting of the Parties. We are confident that, as head of the Ozone Secretariat, you will help us achieve a positive outcome on this issue, and we look forward to our discussions with other countries later this month.

Best regards,

Louise Métivier
A/Assistant Deputy Minister / Sous-ministre adjointe par interim
International Affairs / Affaires internationals
Chief Negotiator for Climate Change /
Négociateur en chef aux changements climatiques
Environment Canada / Environnement Canada

Rafael Pacchiano Alamán
Subsecretario de Gestión para la Protección Ambiental
Secretaría del Medio Ambiente y Recursos Naturales
México

Dr. Daniel A. Reifsnyder
Deputy Assistant Secretary for Environment
United States Department of State

Annex II

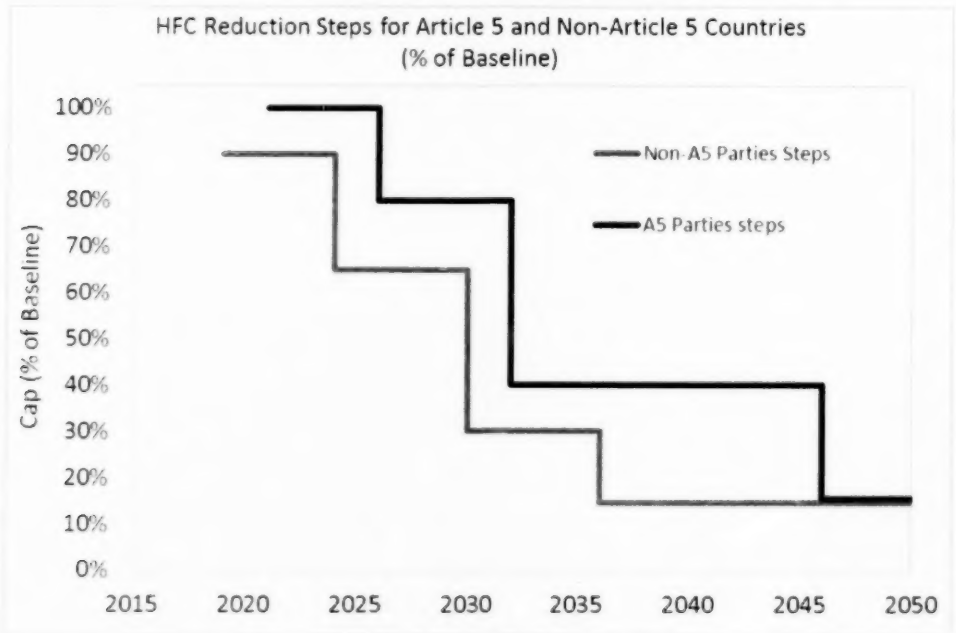
Summary: North American 2015 HFC Submission to the Montreal Protocol

The North American proposal includes a number of changes intended to address concerns raised in discussions in 2014, and is intended as a starting point for discussions on an amendment to the Montreal Protocol on hydrofluorocarbons (HFCs), which are being used predominantly as replacements for ozone-depleting substances being phased out under the Protocol. We welcome further ideas and robust discussion on the key elements of an amendment identified below.

Key elements of the North American proposal:

- Lists 19 HFCs as a new Annex F.
- Recognizes that there may not be alternatives for all HFC applications today and therefore proposes a gradual phasedown with a plateau, as opposed to a phaseout.
- Proposes separate provisions for non-Article 5 and Article 5 phasedown of production and consumption (see figure below) on a global warming potential (GWP)-weighted basis.
  - The baseline for Article 5 countries is calculated as 100% of average HFC consumption and production and 50% of average HCFC consumption and production from 2011-2013.
  - For non-Article 5 countries, the baseline is calculated as 100% of average HFC consumption and production and 75% of average HCFC consumption and production from 2011-2013.
- Includes provisions to limit HFC-23 byproduct emissions.

Proposed HFC Reduction Steps for Article 5 and Non-Article 5 Countries (% of baseline)



Requires licensing of HFC imports and exports, and import and export controls for non-Parties.

- Requires reporting on HFC production, consumption, and byproduct emissions.
- The Multilateral Fund will provide support to Article 5 Parties to implement an amendment

Potential Steps for Non-A5 Parties		Potential Steps for A5 Parties	
2019	90%	2021	100%
2024	65%	2026	80%
2030	30%	2032	40%
2036	15%	2046	15%

Because we have heard the concerns of some countries about the availability of alternatives, we propose including a technology review provision that would call for Parties to review progress at a specified future date in the deployment of climate-friendly alternatives as the basis to consider adjustments to the phasedown schedules.

Cumulative Environmental Benefits:

- Cumulative benefits from an HFC phasedown estimated by the U.S. Government are between 77,400 – 98,900 million metric tons of carbon dioxide equivalent ($MMTCO_2eq$) through 2050, and about 101,800 – 128,400 $MMTCO_2eq$ for 40 years after the effective date of the proposal.
- Cumulative benefits from HFC-23 byproduct emissions controls as estimated by the U.S. Government amount to an additional 12,600 $MMTCO_2eq$ through 2050 and about 16,200 $MMTCO_2eq$ for 40 years after the effective date of the proposal.

Cumulative Consumption Benefits Range through 2050 ($MMTCO_2$ eq)	
World Total	77,400 – 98,900
Byproduct Emissions Benefits	12,600
2015 Proposal Total	90,000 – 111,500
Cumulative Consumption 40-Year Benefits Range ($MMTCO_2$ eq)	
World Total	101,800 – 128,400
Byproduct Emissions Benefits	16,200
2015 Proposal Total	118,000 – 144,600

Relationship to HCFC phaseout:

- The proposal recognizes that HFCs are alternatives in some existing HCFC applications, so baseline levels are set to accommodate some level of transition from HCFCs to HFCs.
- The proposed schedule is intended to be compatible with the current HCFC phaseout steps.

Relationship with the United Nations Framework Convention on Climate Change (UNFCCC):

- The proposal is intended to support overall global efforts aimed at climate system protection.
- The amendment could be complemented by a related decision by the UNFCCC confirming the Montreal Protocol approach.
- The proposal leaves unchanged the provisions of UNFCCC/Kyoto Protocol that govern HFC emissions.

Annex III

Text of North American HFC phase-down amendment proposal

Article I: Amendment

A. Article 1, paragraph 4

In paragraph 4 of Article 1 of the Protocol, for the words:

"Annex C or Annex E"

there shall be substituted:

"Annex C, Annex E or Annex F"

B. Article 2, paragraph 5

In paragraph 5 of Article 2 of the Protocol, for the words:

"and Article 2H"

there shall be substituted:

"Articles 2H and 2J"

D. Article 2, paragraphs 8(a) and 11

In paragraphs 8(a) and 11 of Article 2 of the Protocol, for the words:

"Articles 2A to 2I"

there shall be substituted:

"Articles 2A to 2J".

E. Article 2, paragraph 9

The "and" at the end of subparagraph 9(a)(i) of Article 2 of the Protocol shall be moved to the end of subparagraph 9(a)(ii).

The following subparagraph shall be inserted after subparagraph 9(a)(ii) of Article 2 of the Protocol:

"(iii) Adjustments to the global warming potentials specified in Annexes C and F should be made and, if so, what the adjustments should be;"

In paragraph 9(c) of Article 2 of the Protocol, the following language shall be inserted immediately after the words "In taking such decisions":

"under subparagraphs 9(a)(i) and (ii)":

For the final semi-colon of paragraph 9(c) of Article 2 of the Protocol there shall be substituted:

". In taking such decisions under subparagraph 9(a)(iii), the Parties shall reach agreement by consensus only; "

F. Article 2J

The following Article shall be inserted after Article 2I of the Protocol:

"Article 2J: Hydrofluorocarbons

1. Each Party shall ensure that for the twelve-month period commencing on 1 January [2019], and in each 12-month period thereafter, its calculated level of consumption of the controlled substances in Annex F does not exceed, annually, [ninety] per cent of the average of its calculated levels of consumption of Annex F controlled substances plus seventy five per cent of Annex C, Group I controlled substances for the years 2011, 2012 and 2013. Each Party producing one or more of these substances shall, for the same period, ensure that its calculated level of production of the substances does not exceed, annually, [ninety] per cent of the average of its calculated levels of production of Annex F controlled substances plus seventy-five per cent of Annex C, Group I controlled substances for the years 2011, 2012 and 2013. However, in order to satisfy the basic domestic needs of the Parties operating under paragraph 1 of Article 5, its calculated level of production may exceed that limit by up to ten per cent of the average of its calculated level of production of Annex F controlled substances

plus seventy five per cent of Annex C, Group I controlled substances for the years 2011, 2012, and 2013.

2. Each Party shall ensure that for the twelve-month period commencing on 1 January [2024], and in each 12-month period thereafter, its calculated level of consumption of the controlled substances in Annex F does not exceed, annually, [sixty five] per cent of the average of its calculated levels of consumption of Annex F controlled substances plus seventy-five per cent of Annex C, Group I controlled substances for the years 2011, 2012, and 2013. Each Party producing one or more of these substances shall, for the same period, ensure that its calculated level of production of the substances does not exceed, annually, [sixty five] per cent of the average of its calculated levels of production of Annex F controlled substances plus seventy-five per cent of Annex C, Group I controlled substances for the years 2011, 2012, and 2013. However, in order to satisfy the basic domestic needs of the Parties operating under paragraph 1 of Article 5, its calculated level of production may exceed that limit by up to ten per cent of the average of its calculated levels of production of Annex F controlled substances plus seventy-five per cent of Annex C, Group I controlled substances for the years 2011, 2012, and 2013.

3. Each Party shall ensure that for the twelve-month period commencing on 1 January [2030], and in each 12-month period thereafter, its calculated level of consumption of the controlled substances in Annex F does not exceed, annually, [thirty] per cent of the average of its calculated levels of consumption of Annex F controlled substances plus seventy-five per cent of Annex C, Group I controlled substances for the years 2011, 2012, and 2013. Each Party producing one or more of these substances shall, for the same period, ensure that its calculated level of production of the substances does not exceed, annually, [thirty] per cent of the average of its calculated levels of production of Annex F controlled substances plus seventy five per cent of Annex C, Group I controlled substances for the years 2011, 2012, and 2013. However, in order to satisfy the basic domestic needs of the Parties operating under paragraph 1 of Article 5, its calculated level of production may exceed that limit by up to ten per cent of the average of its calculated levels of production of Annex F controlled substances plus seventy-five per cent of Annex C, Group I controlled substances for the years 2011, 2012, and 2013.

4. Each Party shall ensure that for the twelve-month period commencing on 1 January [2036], and in each 12-month period thereafter, its calculated level of consumption of the controlled substances in Annex F does not exceed, annually, [fifteen] per cent of the average of its calculated levels of consumption of Annex F controlled substances plus seventy-five per cent of Annex C, Group I controlled substances for the years 2011, 2012, and 2013. Each Party producing one or more of these substances shall, for the same period, ensure that its calculated level of production of the substances does not exceed, annually, [fifteen] per cent of the average of its calculated levels of production of Annex F controlled substances plus seventy-five per cent of Annex C, Group I controlled substances for the years 2011, 2012, and 2013. However, in order to satisfy the basic domestic needs of the Parties operating under paragraph 1 of Article 5, its calculated level of production may exceed that limit by up to ten per cent of the average of its calculated levels of production of Annex F controlled substances plus seventy-five per cent of Annex C, Group I controlled substances for the years 2011, 2012, and 2013.

5. Each party manufacturing Annex C Group I or Annex F substances shall ensure that for the 12-month period commencing on January 1, 2018, and in each 12-month period thereafter, its calculated level of emissions of Annex F, Group II substances generated as a byproduct in each production line that manufactures Annex C, Group I or Annex F substances does not exceed [0.1] per cent of the mass of Annex C, Group I or Annex F substances manufactured in that production line.

6. Each Party shall ensure that any destruction of Annex F, Group II substances generated by facilities that produce Annex C, Group I or Annex F substances shall occur only by technologies to be approved by the Parties."

G. Article 3

The preamble to Article 3 of the Protocol should be replaced with the following:

"1. Except as specified in paragraph 2, for the purposes of Articles 2, 2A to 2J and 5, each Party shall, for each group of substances in Annex A, Annex B, Annex C, Annex E or Annex F determine its calculated levels of:"

For the period at the end of subparagraph (c) of Article 3 of the Protocol there shall be substituted a semi-colon, and the "and" at the end of subparagraph (b) of Article 3 of the Protocol shall be moved to the end of subparagraph (c).

The following text should be added to the end of Article 3 of the Protocol:

"(d) Emissions of Annex F, Group II substances generated as a byproduct in each production line that manufactures Annex C, Group I or Annex F substances by including, among other things, amounts emitted from equipment leaks, process vents, and destruction devices, but excluding amounts destroyed, sold for use, or stored.

2. When calculating average levels of production, consumption, imports, exports and emissions of Annex F and Annex C Group I substances for purposes of Article 2J, paragraph 5ter of Article 2, and paragraph 1(d) of Article 3, each Party shall use the global warming potentials of these substances as specified in Annexes C and F."

H. Article 4, paragraph 1 sept

The following paragraph shall be inserted after paragraph 1 sex of Article 4 of the Protocol:

"1 sept. Within one year of the date of entry into force of this paragraph, each Party shall ban the import of the controlled substances in Annex F from any State not party to this Protocol."

I. Article 4, paragraph 2 sept

The following paragraph shall be inserted after paragraph 2 sex of Article 4 of the Protocol:

"2 sept. Within one year of the date of entry into force of this paragraph, each Party shall ban the export of the controlled substances in Annex F to any State not party to this Protocol."

J. Article 4, paragraphs 5, 6 and 7

In paragraphs 5, 6 and 7 of Article 4 of the Protocol, for the words:

"Annexes A, B, C and E",

there shall be substituted:

"Annexes A, B, C, E and F".

K. Article 4, paragraph 8

In paragraph 8 of Article 4 of the Protocol, for the words:

"Articles 2A to 2I"

there shall be substituted:

"Articles 2A to 2J".

L. Article 4B

The following paragraph shall be inserted after paragraph 2 of Article 4B of the Protocol:

"2 bis. Each Party shall, by 1 January 2018 or within three months of the date of entry into force of this paragraph for it, whichever is later, establish and implement a system for licensing the import and export of new, used, recycled and reclaimed controlled substances in Annex F. Any Party operating under paragraph 1 of Article 5 that decides it is not in a position to establish and implement such a system by 1 January 2018 may delay taking those actions until 1 January 2020."

M. Article 5, paragraph 4

In paragraph 4 of Article 5 of the Protocol, for the words:

"Articles 2A to 2I"

there shall be substituted:

"Articles 2A to 2J".

N. Article 5, paragraphs 5 and 6

In paragraphs 5 and 6 of Article 5 of the Protocol, for the words:

"Article 2I"

there shall be substituted:

"Articles 2I and 2J".

O. Article 5, paragraph 8 qua

The following paragraph shall be inserted after paragraph 8 ter of Article 5 of the Protocol:

"8 qua. Each Party operating under paragraph 1 of this Article shall:

(a) in order to meet its basic domestic needs, be entitled to delay its compliance with the control measures set out in each of paragraphs 1, 2, and 3 of Article 2J for two years, and in paragraph 4 of Article 2J for ten years, subject to any adjustments made to the control measures in Article 2J in accordance with Article 2(9);

(b) for purposes of calculating its consumption baseline under Article 2J, use the average of its calculated levels of consumption of Annex F controlled substances plus fifty percent of Annex C, Group I substances in the years 2011, 2012, and 2013 instead of the average of its calculated levels of consumption of Annex F controlled substances plus seventy-five per cent of Annex C, Group I controlled substances for the years 2011, 2012, and 2013;

(c) for purposes of calculating its production baseline under Article 2J, use the average of its calculated levels of production of Annex F controlled substances plus fifty percent of Annex C, Group I substances in the years 2011, 2012, and 2013, instead of the average of its calculated levels of production of Annex F controlled substances plus seventy-five per cent of Annex C, Group I controlled substances for the years 2011, 2012, and 2013;

(d) ensure that its calculated level of consumption and production:

(i) for purposes of paragraph 1 of Article 2J does not exceed, annually, [one hundred] per cent, rather than [ninety] per cent, of the average of its calculated levels of consumption and production, respectively, of Annex F controlled substances plus fifty percent of Annex C, Group I substances for the years 2011, 2012, and 2013;

(ii) for purposes of paragraph 2 of Article 2J does not exceed, annually, [eighty] per cent, rather than [sixty five] per cent, of the average of its calculated levels of consumption and production, respectively, of Annex F controlled substances plus fifty per cent of Annex C, Group I substances for the years 2011, 2012, and 2013;

(iii) for purposes of paragraph 3 of Article 2J does not exceed, annually, [forty] per cent, rather than [thirty] per cent, of the average of its calculated levels of consumption and production, respectively, of Annex F controlled substances plus fifty percent of Annex C, Group I substances for the years 2011, 2012, and 2013.

P. Article 6

In Article 6 of the Protocol, for the words:

"Articles 2A to 2I"

there shall be substituted:

"Articles 2A to 2J".

Q. Article 7, paragraphs 2, 3 and 3 ter

The following line shall be inserted after the line that reads "— in Annex E, for the year 1991," in paragraph 2 of Article 7 of the Protocol:

"— in Annex F, for the years 2011, 2012, and 2013,"

In paragraphs 2 and 3 of Article 7 of the Protocol, for the words:

"C and E"

there shall be substituted:

"C, E and F".

The following paragraph shall be added to Article 7 of the Protocol after paragraph 3 bis:

"3 ter. Each Party shall provide to the Secretariat statistical data of its annual emissions of Annex F, Group II controlled substances in accordance with Article 3(d) of the Protocol, as well as the amount of Annex F, Group II substances captured and destroyed by technologies to be approved by the Parties."

R. Article 10, paragraph 1

In Article 10, paragraph 1 of the Protocol, for the words:

"Articles 2A to 2E and Article 2I"

There shall be substituted:

"Articles 2A to 2E, Article 2I, and Article 2J".

The following shall be inserted at the end of Article 10, paragraph 1 of the Protocol:

"Where a Party operating under paragraph 1 of Article 5 chooses to avail itself of funding from any other financial mechanism that could result in meeting any part of its agreed incremental costs, that part shall not be met by the Financial Mechanism under Article 10 of this Protocol.

S. Annex C and Annex F

Annex C, Group I is amended to add the 100-year Global Warming Potential for the following substances:

Substance	100 year Global Warming Potential
HCFC-21	151
HCFC-22	1,810
HCFC-123	77
HCFC-124	609
HCFC-141b	725
HCFC-142b	2,310
HCFC-225ca	122
HCFC-225cb	595

A new Annex F shall be added to the Protocol, following Annex E. It shall read:

Annex F: Controlled Substances

Substance	100 year Global Warming Potential
Group I	
HFC-32	675
HFC-41	92
HFC-125	3,500
HFC-134	1,100
HFC-134a	1,430
HFC-143	353
HFC-143a	4,470
HFC-152	53
HFC-152a	124
HFC-161	12
HFC-227ea	3,220
HFC-236cb	1,340
HFC-236ea	1,370
HFC-236fa	9,810
HFC-245ca	693
HFC-245fa	1,030
HFC-365mfc	794

HFC-43-10mee	1,640
Group II	
HFC-23	14,800

Article II: Relationship to the 1999 Amendment

No State or regional economic integration organization may deposit an instrument of ratification, acceptance or approval of or accession to this Amendment unless it has previously, or simultaneously, deposited such an instrument to the Amendment adopted at the Eleventh Meeting of the Parties in Beijing, 3 December 1999.

Article III: Relationship to the United Nations Framework Convention on Climate Change and Its Kyoto Protocol

This Amendment is not intended to have the effect of excepting hydrofluorocarbons from the scope of the commitments contained in Articles 4 and 12 of the United Nations Framework Convention on Climate Change and in Articles 2, 5, 7 and 10 of its Kyoto Protocol that apply to "greenhouse gases not controlled by the Montreal Protocol." Each party to this Amendment shall continue to apply the provisions of the United Nations Framework Convention on Climate Change and its Kyoto Protocol identified above to HFCs as long as those provisions, respectively, remain in force with respect to such party.

Article IV: Entry into force

1. Except as noted in paragraph 2, below, this Amendment shall enter into force on 1 January 2018, provided that at least twenty instruments of ratification, acceptance or approval of the Amendment have been deposited by States or regional economic integration organizations that are Parties to the Montreal Protocol on Substances that Deplete the Ozone Layer. In the event that this condition has not been fulfilled by that date, the Amendment shall enter into force on the ninetieth day following the date on which it has been fulfilled.

2. The changes in Sections H and I of Article I of this Amendment shall enter into force on 1 January 2020, provided that at least eighty instruments of ratification, acceptance or approval of the Amendment have been deposited by States or regional economic integration organizations that are Parties to the Montreal Protocol on Substances that Deplete the Ozone Layer. In the event that this condition has not been fulfilled by that date, the Amendment shall enter into force on the ninetieth day following the date on which it has been fulfilled.

3. For purposes of paragraphs 1 and 2, any such instrument deposited by a regional economic integration organization shall not be counted as additional to those deposited by member States of such organization.

4. After the entry into force of this Amendment, as provided under paragraphs 1 and 2, it shall enter into force for any other Party to the Protocol on the ninetieth day following the date of deposit of its instrument of ratification, acceptance or approval.

Annex IV

Draft decision submitted by Canada, Mexico and the United States of America

Draft decision [...]: proposed amendment to the Montreal Protocol in respect of hydrofluorocarbon phase-down

The Twenty-Seventh Meeting of the Parties decides:

Recalling the outcome document of the United Nations Conference on Sustainable Development, entitled "The future we want", in which countries expressed their support for a gradual phase-down in the consumption and production of hydrofluorocarbons, [1]

Recognizing the high global-warming potential of hydrofluorocarbons that have come into use as substitutes for substances being phased out under the Montreal Protocol on Substances that Deplete the Ozone Layer,

Bearing in mind the commitments contained in articles 4 and 12 of the United Nations Framework Convention on Climate Change and in articles 2, 5, 7 and 10 of its Kyoto Protocol that apply to greenhouse gases not controlled by the Montreal Protocol, and not intending to exclude hydrofluorocarbons from the scope of those commitments,

1. To adopt, in accordance with the procedure laid down in paragraph 4 of Article 9 of the Vienna Convention, the amendment to the Montreal Protocol related to hydrofluorocarbons as set out in annex [...] to the report of the Twenty-Seventh Meeting of the Parties, on the basis of the following considerations:

(a) For parties not operating under paragraph 1 of Article 5 of the Montreal Protocol, to establish as the baselines for hydrofluorocarbon consumption and hydrofluorocarbon production, respectively, the average of 2011–2013 hydrofluorocarbon consumption plus 75 per cent of hydrochlorofluorocarbon consumption, and the average of 2011–2013 hydrofluorocarbon production plus 75 per cent of hydrochlorofluorocarbon production, calculated using the global-warming potentials of hydrofluorocarbons and hydrochlorofluorocarbons contained in the annex to the present decision;

(b) For parties operating under paragraph 1 of Article 5 of the Montreal Protocol, to establish as the baselines for hydrofluorocarbon consumption and hydrofluorocarbon production, respectively, the average of 2011–2013 hydrofluorocarbon consumption plus 50 per cent of hydrochlorofluorocarbon consumption, and the average of 2011–2013 hydrofluorocarbon production plus 50 per cent of hydrochlorofluorocarbon production, calculated using the global-warming potentials of hydrofluorocarbons and hydrochlorofluorocarbons contained in the annex to the present decision;

(c) For parties not operating under paragraph 1 of Article 5 of the Montreal Protocol, the consumption and production of hydrofluorocarbons listed in the annex to the present decision shall be reduced to a level that does not exceed:

(i) [90] per cent of their baseline levels by [2019];

(ii) [65] per cent of their baseline levels by [2024];

(iii) [30] per cent of their baseline levels by [2030];

(iv) [15] per cent of their baseline levels by [2036] and thereafter;

[1] General Assembly resolution 66/288, annex, para. 222.

(d) For parties operating under paragraph 1 of Article 5 of the Montreal Protocol, the consumption and production of hydrofluorocarbons listed in the annex to the present decision shall be reduced to a level that does not exceed:

(i) [100] per cent of their baseline levels by [2021];

(ii) [80] per cent of their baseline levels by [2026];

(iii) [40] per cent of their baseline levels by [2032];

(iv) [15] per cent of their baseline levels by [2046] and thereafter;

(e) In order to satisfy the basic domestic needs of parties operating under paragraph 1 of Article 5 of the Montreal Protocol, parties are allowed to exceed their production limit under each of the reduction steps specified in paragraphs (c) and (d) of the present decision by up to 10 per cent of their baseline levels;

(f) Hydrofluorocarbon-23 by-product emissions from each production line that manufactures hydrochlorofluorocarbons or hydrofluorocarbons shall not exceed [0.1] per cent of the mass of the hydrochlorofluorocarbons or hydrofluorocarbons manufactured in that production line;

(g) The import and export of hydrofluorocarbons listed in the annex to the present decision shall be licensed, and the import and export of these substances to non-Parties shall be banned;

(h) The consumption and production of hydrofluorocarbons and emissions of hydrofluorocarbon-23 by-product shall be reported to the Secretariat annually;

(i) The phase-down of the consumption and production of the hydrofluorocarbons listed in the annex to the present decision and hydrofluorocarbon-23 by-product emissions control requirements shall be eligible for funding under the Multilateral Fund in accordance with Article 10 of the Montreal Protocol, unless they are being funded from other sources.

2. To consider possible adjustments to the schedule of reduction of consumption and production of hydrofluorocarbons (Annex F substances in paragraph [XX] of the amendment) in the context of progress of deployment of alternatives, including in high ambient temperature conditions, no later than 2025 where this relates to parties not operating under paragraph 1 of Article 5 of the Montreal Protocol, and no later than 2030 where it relates to parties operating under paragraph 1 of Article 5 of the Montreal Protocol.